



**JOINT ELECTRICITY REGULATORY COMMISSION
FOR MANIPUR AND MIZORAM
AIZAWL : MIZORAM**

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No. H. 11019/27/16-JERC

Dated Aizawl, the 3rd April, 2019

**MINUTES OF THE 21ST MEETING OF THE STATE ADVISORY COMMITTEE OF
MIZORAM HELD ON 21ST FEBRUARY, 2019 FROM 11 AM AT AIJAL CLUB, NEAR
TENNIS COURT, AIZAWL.**

The Chairman of the committee, Mr. Lalchharliana Pachuau, Chairperson of the Joint Commission for Manipur & Mizoram chaired the Meeting. The list of members and participants attending the Meeting is appended.

After welcoming the Members and the Invitees, the Chairperson initiated the agenda wise discussion as below:

Agenda No.1. Confirmation on the Minutes of the 20th Meeting of the SAC, Mizoram held on 22nd February, 2018.

The Chairman requested the members to give their comments on the minutes of the 20th SAC and after obtaining nods from the members, the minutes was declared as confirmed.

Agenda No. 2. Action taken report on the minutes of 20th SAC Meeting, Mizoram.

i) Up-to-date status of formation of Vigilance Committee to reduce theft and unauthorized use of electricity and action taken report (vide Agenda 3 of the minutes of 20th Meeting of SAC, Mizoram)

Vigilance Committees were formed throughout Mizoram except within Champhai Power Circle. The Functioning of this Vigilance Committee is sometimes confused with normal practice of the Department regarding theft checking of consumers. It is therefore, proposed to be discussed and clarify the jurisdiction of this committee in the next SAC Meeting.

However, Champhai Circle is also instructed to establish the Committee and give report.

ii) Up-to-date status of installation of meters 132kV, 33kV, 11kV level and at distribution transformers to ascertain exact energy losses at the level of 132kV, 33kV, 11kV and LT lines (vide Agenda 5 of the minutes of 20th Meeting of SAC, Mizoram.)

It is reported that all feeders are metered. However to ascertain accuracy and reliability of these meters, meter readings are collected from site offices. Detailed report is to be submitted by May, 2019 to JERC without fail.

iii) Up-to-date progress of Plan works (vide Agenda 5 of the minutes of Meeting of SAC, Mizoram)

Up-to-date progress of plan work detail as on Feb 2019

A. DEALT BY CIVIL BRANCH

SI No	Name of works	Fund Allocation 2018-19	Upto date progress
1	Construction of Tuiching & Tuiriza MHP	Rs 7.33 lakhs	As per QPR ending December 2018, update physical progress of works is 97% and upto date financial progress is Rs. 284.23 lakhs
2	Preparation of DPR of Tuirini SHP	Rs. 5.00 lakhs	Preparation of DPR is completed and is available in E-in-C office.
3	S&I of Iva, Ngenrual & Khawiva-II SHP	Rs. 14.73 lakhs	S&I works are going on

B. STATUS OF PLAN WORKS DEALT BY PLANNING BRANCH AS ON FEBRUARY 2019

SI No	Name of Work	Funding Source	A/A Amount	E/S Received	Rs in lakh	
					Up to date physical progress	Target date of Completion
1	Constn of 33kV line on tower Aibawk to Sialsuk with associated 11kV lines	NEC & State	1,478.00	1,099.99	90%	Feb-19
2	Constn of 132kV S/S for shifting 132kV Zuangtui S/S with associated lines	NEC & State	2,077.00	1,944.44	100%	Completed
3	Construction of 110Km 132kV S/C line from Melriat to Khawiva	DoNER & State	4,176.07	4,176.07	95%	Mar-19
4	Construction of 2x2.5 MVA, 33/11kV Sub-Station at Saiha	DoNER & State	766.00	296.67	35%	May-20
5	Construction of 2x2.5 MVA, 33/11kV Sub-Station at Lawngtlai	DoNER & State	678.00	270.00	27%	May-20
6	Strengthening of 33kV S/S at Zaizawhtlang and Thenhlum	NEC & State	525.00	200.00	60%	Apr 19
7	Constn. Of 33kV S/C line on D/C tower from Kau Tlabung to Thenhlum	DoNER & State	782.00	312.80	25%	May-20
8	Constn of 132kV S/C on DEC tower from Bairabi to W.Phaileng via Mamit	NEC & State	4,945.50	1,439.98	25%	Jun-20

SI No	Name of Work	Funding Source	A/A Amount	E/S Received	Up to date physical progress	Target date of Completion
9	Tuiriza (100kW) and Tuiching (100kW) Micro Hydel Project - 2x100kW in Phullen and Hrianghmun	NEC & State	376.06	265.12	99%	Dec-18
10	Tlungvel Solar Park	NEDP	1,400.00	791.15	55%	Mar-19
11	Development of Hawla Island	NEDP	200.00	200.00	10%	Mar-20
12	Construction of Kawlbem SHP	NABARD	4,960.00	4,442.10	89%	Jun-19
13	Construction of Tlawva SHP	NABARD	7,340.00	7,270.02	87%	Mar-19
14	Installation of 2x25MVA transformer at Zuangtui 132kV S/S with associated bays	NEDP	703.42	703.42	50%	Mar-19
15	Augmentation of 33/11kV S/S within Aizawl	NEDP	500.00	500.00	10%	Dec-19
16	132kV D/C Sihhmui S/S to Airport Road to re-align W.Phaileng line with associated bay	NEDP	857.00	265.97	0%	Mar-20
17	Pre-paid Smart Metering as Pilot Projects at Zarkawt Feeder for reduction of T&D Losses	NEDP	233.00	233.00	0%	Mar-20
18	Improvement of 132kV lines from Bukpui to Khawzawl via E.Lungdar	NEDP	715.76	181.00	0%	Mar-20
19	Vankal Solar Park	NEDP	2,107.15	1,707.07	65%	Mar-19
20	Construction of 132kV D/C line from Melriat to Khumtung	NEDP	1,551.00	233.77	0%	Mar-21

All works are monitored closely so as to complete at the scheduled time

C. PROGRESS OF WORKS UNDER INTEGRATED POWER DEVELOPMENT SCHEME (IPDS)

The scheme aims at strengthening of Sub-Transmission Network, Metering, IT application and provision of Solar Panels and ultimately to achieve reduction of AT&C Loss to 15%. The scheme is being implemented in 12(Twelve) towns viz. Kawnpui, Vairengte, Mamit, Khawhai, Thenzawl, Hnahthial, Bairabi, Zawlnuam, Darlawn, North Vanlaiphai, Biate and Tlabung.

IPDS (1st 6 Towns)

- Project Cost : Rs. 49.16 Cr.
- Target date of completion : March '19
- Town-wise progress:
 - Kawnpui : 97%
 - Vairengte : 97%
 - Thenzawl : 90%
 - Mamit : 50%
 - Khawhai : 40%
 - Hnahthial : 97%

IPDS (2nd 6 Towns)

- Project Cost : Rs. 40.00 Cr.
- Target date of completion : Dec '19
- Town-wise progress : Mobilisation of materials in progress in respect of all town i.e. Bairabi, Zawlnuam, Darlawn, North Vanlaiphai, Tlabung & Biate.

Financial Status:

Total Project Cost (1st & 2nd towns) : Rs. 89.16 Cr

Fund Received : Rs. 17.41 Cr

Physical Progress:

Sl No	Item of Works	Quantity	Units	Up-to-date status (%)
1	33/11kV S/S : New	2	Nos	25%
2	33kV Sub Station : Capacity Enhancement	1		
3	R&M of 33kV SS	5	Nos	40%
4	33kV feeders : New Line	36.00	Kms	50%
5	33kV feeders Recon/Augment	5.00	Kms	100%
6	11kV Line : New Feeder Bifurcation	89.35	Kms	31%
7	11kV Line : Augmentation / Reconductoring	7.00	Kms	100%
8	Arial Bunched Cable i. HT – 11kV 3 x 95 Sqmm ABC New Line ii. LT – New Line by ABC 95 Sqmm iii. New LT Line by ABC 95 Sqmm iv. New LT Line by ABC 120 Sqmm	90.00	Kms	32.79%
9	Installation of Distribution Transformer i. 63kVA Distribution Transformer ii. 100kVA Distribution Transformer iii. 250kVA Distribution Transformer	54.00	Nos	51.85%
10	Capacity enhancement of LT Sub-station i. Augmentation by 100kVA ii. Augmentation by 250kVA	15	Nos	53.33%
11	LT Line: New Feeder/Feeder Bifurcation i. New LT Line (Gnat & Ant) 3-Ph 5 wire ii. New LT Line (Gnat & Grasshopper) 3-ph 5 Wire iii. LT Line Bifurcation (Using ABC 70 Sqmm) iv. LT Line Bifurcation (Using ABC 95 Sqmm) v. LT Line Bifurcation (Using ABC 120 Sqmm)	130.23	Kms	58.42%
12	LT Line : Augmentation / Reconductoring i. Conversion of 3-wire into 5-wire ii. Reconductoring using Grasshopper iii. Reconductoring using ABC 70 Sqmm iv. Reconductoring using ABC 95 Sqmm v. Reconductoring using ABC 120 Sqmm	56.00	Kms	75.54%

Sl No	Item of Works	Quantity	Units	Up-to-date status (%)
13	Metering			
	i. Boundary meters for ring fencing of Non-RAPDRP Towns with population more than 5000	17.00	Nos	83.35%
	ii. AMR for feeders, Distribution transformer and high load consumers			
	iii. Consumer for existing un-metered connections, replacement of faulty meters & electro-mechanical meters	45.00	Nos	82.22%
	a) 1-Phase			
	b) 3-phase			
	iv. Installation of Pillar Box for relocation of meters outside the premises of consumers including associated cables and accessories	3862.00	Nos	80.27%
14	Provisioning of Solar Panel			
	i. Location 1/(Capacity)	21.00	kWp	42.86%
15	Others			
	i. R&M of Distribution Transformer 63kVA	6	Nos	50%
	ii. R&M of Distribution Transformer 100kVA	24	Nos	70.83%
	iii. R&M of Distribution Transformer 250 kVA	19	Nos	42.11%
	iv. Replacement of LT Poles (Due to Rusting)	392	Nos	39.54%
			Total	55%

iv) Report on updating contracted load and connected load (vide Agenda 6 of the minutes of SAC Mizoram)

Connected Load and Contracted Loads are reported to have been separately dealt except within Champhai Power Circle. Instruction has been issued to concerned Circle to follow the previous instruction.

Action is also being taken to display both connected load and Contracted Load of Consumer in their energy bill for RAPDRP Towns.

A detailed report in this matter will be submitted by P&ED by June, 2019.

v) Up-to-date status of online bill payment (vide Agenda 7 of the minutes of 20th Meeting of SAC, Mizoram)

The existing on-line billing software is designed and developed by Mizoram State e-Governance Society way back in 2017 for use as a temporary measure for enabling citizens. It is a web-based software application for IT enablement of various processes related to billing and payment of electricity services covering both RAPDRP and non-RAPDRP consumers within Aizawl city. The portal has a provision for uploading of bills and downloading of payment data.

Various activities involved in the process of online bill payment may briefly be highlighted as below:-

The data source for RAPDRP consumers is at Data Centre, Guwahati with which the bills are prepared by the department. The non-RAPDRP consumer's bills are generated from the software owned by the department.

P&ED uploads the both RAPDRP and non-RAPDRP bills on the portal <https://powerbilling.mizoram.gov.in> and enable the portal for payment of bills.

Citizens are able to make payment of electricity bills through P&E website using credit card, debit card and net banking whichever is convenient anytime, anywhere and received confirmation through SMS and Email.

Bill Desk provides solution for enabling digital payment by integrating their payment gateway with portal developed by MSeGS through Application Programme Interface (API).

Once online payment is completed, the paid amount is deposited to the Bill Desk bank account, which is then deposited back to P&E bank account within T+2 days. The department again downloads the payment reports from payment portal and prepares consolidated reports based on daily MIS report sent by Bill Desk (Payment Gateway) through email.

Consolidated payment report is again sent to M/s TCS Ltd. within due date for RAPDRP server for updation of payment.

P&ED cross checks/ compares the amount received through online portal report and the amount received in the bank account.

Bill Desk collects convenience fee to the consumers for enabling the payment gateway as per rates mentioned below-

Net Banking	:	Rs 5.00 (below Rs. 500.00) and Rs. 7.00 (above Rs. 500.00) per transaction.
Credit Card	:	1% of bill amount.
Debit Card	:	1% (above Rs. 2000.00) and free (upto Rs. 2000.00) of bill amount.
Mobile Wallet	:	Rs. 5.00 per transaction.

In order to ensure compliance of RBI guidelines in Bharat Bill Payment System to all power billers in India by Ministry of Electronics & Information Technology, P&E Department also has initiated steps to onboard BBPS early. In this respect, P&ED, MSeGS, NPCI, Bill Desk/HFDC and TCS Ltd. will have to play their respective roles to achieve on boarding BBPS successfully.

TCS ltd, being the system integrator for RAPDRP project have developed a software for billing and payments of electric bills for RAPDRP consumers. A portal <https://powermizoram.gov.in> was developed by TCS ltd to enable consumers under RAPDRP payment of electric bills online. In the meantime, TCS ltd is also in a process of enabling power bill payment through BBPS, created an API and integrated the portal developed by MSeGS to onboard BBPS on non-RAPDRP consumers. Integration with NPCI is under process, and it is expected to be implemented by March 2019. In this system, non-RAPDRP consumers shall also be able to pay their bill through BBPS as the TCS application for RAPDRP and the applications for non RAPDRP consumers developed by MSeGS will be interchanging information through API. Once the consumers paid their bills the database will be updated instantly. As such the issues in the previous systems will be removed where manual updating on the database on both TCS Server and P&ED Servers are required from payment information prepared based on the consolidated report prepared from daily MIS report sent by BillDesk and report downloaded from MSeGS applications.

vi) Up-to-date status of RPO achievement and Solar Rooftop installation /Projects (vide agenda of the minutes of 20th Meeting of SAC, Mizoram)

RPO Achievement:

- a) Non-Solar: Target is 9.0% of total consumption including hydro sources of power = 23156 MWh.
Achievement=62682MWh
- b) Solar Target is 5.5% of total consumption = 14150MWh.

Achievement = RE Certificate purchased for FY 2018-19.

c) Solar Rooftop Project : No Achievement for 2017-18

RPO Calculation sheet for FY 2017-18 and FY 2018-19 is as below:-

Reporting Period : FY 2017-18

Name of Distribution Licensee : P&E Department, Government of Mizoram

SL No.	GROSS CONSUMPTION	Quantum (MUs)	Remarks
A	NON-SOLAR		
1	Own Generation		
	1. Tuipanglui SHP	-	
	2. Khawiva SHP	2.009	
	3. Maicham - I SHP	3.670	
	4. Maicham - II SHP	4.214	
	5. Kau Tlabung SHP	7.526	
	6. Teirei SHP	-	
	7. Serlui 'A' SHP	-	
	8. Tuipui SHP	0.995	
	9. Lamsial SHP	0.057	
	10. Serlui 'B' SHP	39.479	
	Total (1)	57.950	
2	Purchase from other generating Company / Intermediaries		
	Energy from ER		
	1. Farraka STPP Stage I,II & III, NTPC (ER) (1600MW)	13.448	Total ER is less ER transmission loss as permitted under JERC T.O. 2017-18
	2. Kalhalgaon STPP - I,II, NTPC (ER) (840MW)	7.847	
	3. Talcher STPP-I & II, NTPC (ER) (1000 MW)	9.392	
	4. Bongaigaon (Thermal) (250MW)	104.566	
	ER	135.253	
	Total ER	132.413	
	Energy from NER		
	4. Kopilli HEP, NEEPCO (200MW)	47.542	Total (ER + NER) is after deducting NER transmission loss as per T.O. 2017-18 and excluding all consumption met from hydro sources as per MOP order No. 23/3/2016-R&R Dt. 22.07.2016
	5. Khandong HEP, NEEPCO (50MW)	9.428	
	6. Ranganadi HEP, NEEPCO (405MW)	79.396	
	7. Doyang HEP, NEEPCO (75MW)	12.846	
	8. Kopilli - II HEP, NEEPCO (25MW)	6.858	
	9. AGBPP, NEEPCO (291MW)	82.812	
	10. AGTCCPP, NEEPCO (130MW)	40.120	
	11. BaraMUra Unit - IV, TSECL (5.25MW)	26.334	
	12. BaraMUra Unit - V, TSECL (5.25MW)	14.930	
	13. Palatana Gas Based, OTPC (22MW)	117.078	
	14. Loktak HEP, NHPC (105MW)	40.435	
NER	281.275		
Total (ER + NER)	413.688		
UI Net	23.44		
	Total (2)	437.130	

3	Sale to Other Licensee / intermediaries		Total GEC is less Intra State transmission loss as per T.O. 2017-18
	Sales Through Exchange	164.661	
	Total (3)	164.661	
	Total (after Deducting trading) (2-3)	272.468	
	Total (ER+ NER) (4)	265.248	
4	GEC (1+4) (excluding Hydro Sources)	265.248	
	Total GEC	257.291	
5	RPO (9% of Total Consumption)	23.156	
6	Non - solar RPO achievement (incl 25 MW Kopilli-II)	62.682	
B	SOLAR		
1	Own Generation		
	Sub Total (1)		
2	Purchase from other generating Company / Intermediaries		
	Sub Total (2)		
3	Sale to Other Licensee / intermediaries		
	Sub Total (3)		
4	Total GEC (1+2-3)		
5	RPO (5.5% of Total Consumption)	14.15	
6	Solar RPO achievement		

GROSS ENERGY CONSUMPTION (FY 2018-19)

Name of Distribution Licensee : P&E Department, Government of Mizoram

SL No.	GROSS CONSUMPTION	Q1	Q2	Q3	Q4 (Assumed)	Total	Remarks
A	NON-SOLAR						
1	Own Generation						
	1. Tuipanglui SHP	-	-	-	-	-	
	2. Khawiva SHP	0.121	0.768	0.283	-	1.172	
	3. Maicham - I SHP	0.222	0.916	0.055	0.030	1.224	
	4. Maicham - II SHP	-	1.163	0.169	0.033	1.365	
	5. Kau Tlabung SHP	1.253	4.061	1.538	0.188	7.040	
	6. Teirei SHP	-	-	-	-	-	
	7. Serlui 'A' SHP	-	-	-	-	-	
	8. Tuipui SHP	0.032	0.535	0.090	-	0.656	
	9. Lamsial SHP	-	0.104	0.052	-	0.156	
	10. Serlui 'B' SHP	7.114	3.122	6.912	9.000	26.148	
	Total (1)	8.742	10.668	9.099	9.251	37.760	
2	Purchase from other generating Company / Intermediaries						
	Energy from ER						
	1. Farraka STPP Stage I,II & III, NTPC (ER) (1600MW)	3.390	4.099	4.306	4.306	16.101	Total ER is less ER transmission loss as permitted under JERC T.O. 2018-19
	2. Kalhalgaon STPP - I,II, NTPC (ER) (840MW)	2.222	2.088	2.176	2.176	8.662	
3. Talcher STPP-I & II, NTPC (ER) (1000 MW)	2.656	2.381	1.923	1.923	8.883		

	4. Bongaigaon (Thermal) (250MW)	41.778	28.480	33.683	33.683	137.624	
	ER	50.045	37.048	42.088	42.088	171.270	
	Total ER	48.989	36.266	41.200	41.200	167.656	
	Energy from NER						
	4. Kopilli HEP, NEEPCO (200MW)	11.215	18.720	9.696	8.080	47.711	Total (ER + NER) is after deducting NER transmission loss as per T.O. 2018-19 and excluding all consumption met from hydro sources as per MOP order No. 23/3/2016-R&R Dt. 22.07.2016
	5. Khandong HEP, NEEPCO (50MW)	1.963	3.724	1.329	0.370	7.387	
	6. Ranganadi HEP, NEEPCO (405MW)	16.067	29.296	10.989	0.122	56.474	
	7. Doyang HEP, NEEPCO (75MW)	2.553	7.609	0.941	0.513	11.616	
	8. Kopilli - II HEP, NEEPCO (25MW)	1.806	2.792	0.784	0.357	5.740	
	9. Pare HEP, NEEPCO (110MW)	3.616	10.757	3.971	0.044	18.389	
	10. AGBPP, NEEPCO (291MW)	18.230	20.381	25.068	16.991	80.670	
	11. AGTCCPP, NEEPCO (130MW)	8.652	8.349	11.417	9.277	37.695	
	12. Total BaraMUra Unit - IV, (5.25MW) and Unit - V, (5.25MW)	10.374	10.488	10.374	9.918	41.154	
	13. Palatana Gas Based, OTPC (22MW)	29.937	31.985	37.230	30.813	129.965	
	14. Loktak HEP, NHPC (105MW)	8.249	11.120	4.482	2.639	26.490	
	NER	67.194	71.202	84.089	66.999	289.484	
	Total (ER + NER)	116.183	107.468	125.290	108.199	457.140	
	UI/IEX Purchased				9.045	9.045	
	Total (2)	116.183	107.468	125.290	117.244	466.185	
3	Sale to Other Licensee / intermediaries						
	Sales Through Exchange	40.244	62.494	43.531	35.315	181.584	
	Total (3)	40.244	62.494	43.531	35.315	181.584	
	Total (after Deducting trading) (2-3)	75.939	44.974	81.758	81.929	284.601	
	Total (ER+ NER) (4)	73.965	43.805	79.633	79.799	277.201	
4	GEC (1+4) (excluding Hydro Sources)	73.965	43.805	79.633	79.799	277.201	Total GEC is less Intra State transmission loss as per T.O. 2018-19
	Total GEC	71.746	42.491	77.244	77.405	268.885	
5	RPO (10.25% of Total Consumption)	7.354	4.355	7.917	7.934	27.561	
6	Non - solar RPO achievement (icl 25 MW Kopilli-II)	10.200	13.009	9.573	9.314	42.097	
B	SOLAR						
1	Own Generation						
	Sub Total (1)			0.099	0.100	0.199	
2	Purchase from other generating Company / Intermediaries						
	Sub Total (2)						
3	Sale to Other Licensee / intermediaries						
	Sub Total (3)						
4	Total GEC (1+2-3)			0.099	0.100	0.199	
5	RPO (6.75% of Total Consumption)	4.843	2.868	5.214	5.225	18.150	
6	Solar RPO achievement						

vii) Up-to-date status of unbundling/restriction of the P&E Deptt. (vide Agenda of the minutes of 20th Meeting of SAC, Mizoram)

Proposal for restructuring of the Department submitted to Government of Mizoram is declined. The Department is rather instructed to submit proposal for Corporatisation. To frame this proposal ACSI is engaged as Consultant to prepare the proposal, and is still awaited.

Agenda 3 : Determination of Retail Tariff of P&E Department for FY 2019 - 20.

The P&E Department get a power point presentation and explain in details on their proposed tariff. Pu Vanlalruata, President YMA has stated that there is still accounting failure in the power Department and that continuously raising the tariff without following proper accounting procedures is not good and informed the Committee that the P&E Department should take due care on the accounting procedures. Mr. R.K. Thanga, President, Mizoram UPA Pawl Gen. Hqrs also stated that it is high time now to have proper assessment of revenue. Mr. Lalchharliana Pacchuau, Chairperson also stated that the Department should look for more ways on collection of revenue through internet. The members agreed for nominal increase in tariff.

Agenda 4 : Opening of Revenue Centre at Sakawrdai

It was also discussed to open more Revenue Collection Centre at Sakawrdai, if the situation permits. This will relieve consumer from surrounding 14 villages to spend extra money for paying bills at Darlawn 50 Km away from Sakawrdai. The Department should approach state government for peaceful atmosphere and open bank for depositing the collected Revenue to avoid carriage of cash

The Meeting ended at 02:30 p.m. with a vote of thanks from the chair.

Sd/- LALCHHARLIANA PACHUAU
Chairperson

Memo No.H.11019/27/12-JERC

: Dated Aizawl, the 3rd April, 2019

Copy to:

1. P.S to Hon'ble Chief Minister, i/c P&E Department, Gov't of Mizoram for kind information to the Hon'ble Chief Minister.
2. PS to Secretary, P&E Department, Gov't of Mizoram for kind information to the Secretary and for taking necessary action on the Minutes of the Meeting.
3. All Members / Invitees of the State Advisory Committee for kind information and for taking necessary action on the Minutes of the Meeting.
4. Guard File.


(RICHARD ZOTHANKIMA)
Assisiant Secretary